



Dock t No. 55965 (46342)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: T. Ito, et al.

SERIAL NO: 09/857,815

GROUP: Not Yet Assigned

FILED: June 8, 2001

EXAMINER: Not Yet Assigned

FOR: BETACELLULIN MUTEIN

BOX SEQUENCE  
COMMISSIONER FOR PATENTS  
WASHINGTON, DC 20231

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CERTIFICATE OF MAILING FOR SUBMISSION  
OF CORRECTED SEQUENCE LISTING

SIR:

I hereby certify that this SUBMISSION OF CORRECTED SEQUENCE LISTING IN  
RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE,  
including:

- 1) COPY OF NOTIFICATION OF DEFECTIVE RESPONSE, INCLUDING RAW  
SEQUENCE LISTING ERROR REPORT AND MARKED-UP RAW  
SEQUENCE LISTING mailed January 23, 2002 (14 pages);
- 2) PAPER COPY OF CORRECTED SEQUENCE LISTING (pages 1/15-15/15);
- 3) COMPUTER READABLE FORM OF CORRECTED SEQUENCE LISTING  
(CRF) (1 Disc);
- 4) AMENDMENT DIRECTING ENTRY OF PAPER COPY OF CORRECTED  
SEQUENCE LISTING INTO SPECIFICATION (2 pages); and
- 5) STATEMENT IN SUPPORT OF FILING AND SUBMISSIONS IN  
ACCORDANCE WITH 37 CFR §§1.821-1.825 (1 page);

for the above-identified Application is being deposited with the United States Postal Service as  
first class mail in an envelope addressed to BOX SEQUENCE, Commissioner for Patents,  
Washington, DC 20231, on this 25th day of February, 2002.

Fatima H. DeArruda

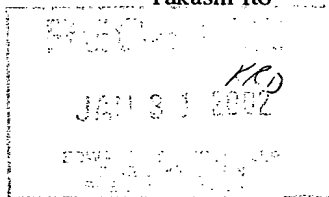


UNITED STATES PATENT AND TRADEMARK OFFICE

 Commissioner for Patents, Box PCT  
 United States Patent and Trademark Office  
 Washington, D.C. 20231  
 www.uspto.gov


U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/857,815	Takashi Ito	46342/55965

David G. Conlin  
 Dike Bronstein Roberts & Cushman  
 Edwards & Angell  
 P.O. Box 9169  
 Boston, MA 02209

**COPY**

INTERNATIONAL APPLICATION NO.	
PCT/JP99/06873	
I.A. FILING DATE	PRIORITY DATE
12/08/1999	12/09/1998

CONFIRMATION NO. 9695

371 FORMALITIES LETTER



\*OC000000007345085\*

Date Mailed: 01/23/2002

**NOTIFICATION OF DEFECTIVE RESPONSE**

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Priority Document
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Request for Immediate Examination

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
  - SEE RAW SEQUENCE LISTING ERROR REPORT
  - APPLICANT MUST PROVIDE:
    - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
    - A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
  - For Rules Interpretation, call (703) 308-4216
  - To Purchase PatentIn Software, call (703) 306-2600

*Sequence Listing*  
 Edwards & Angell LLP  
 Dike, Bronstein, Roberts & Cushman  
 101 Federal St. Boston, MA 02110  
 Date Rec'd 1/31/02  
 Docketed For Feb. 11 - Feb. 25, 2002  
 By KRD  
 Approved [Signature]

- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended up to a maximum of six months.

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

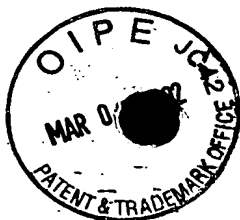
*A copy of this notice **MUST** be returned with the response.*

BARBARA A CAMPBELL

Telephone: (703) 305-3631

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/857,815	PCT/JP99/06873	46342/55965



# COPY

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

09/857815

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY:

1 \_\_\_\_\_ Wrapped Nucleics  
\_\_\_\_\_ Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if you was retrieved in a word processor after creating it. Please adjust your right margin to 3; this will prevent "wrapping."

2 \_\_\_\_\_ Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 \_\_\_\_\_ Misaligned Amino  
\_\_\_\_\_ Numbering

The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 \_\_\_\_\_ Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 \_\_\_\_\_ Variable Length.

Sequence(s) \_\_\_\_\_ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 \_\_\_\_\_ PatentIn 2.0  
\_\_\_\_\_ "bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7 \_\_\_\_\_ Skipped Sequences  
(OLD RULES)

Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped.

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequence.

8 \_\_\_\_\_ Skipped Sequences  
(NEW RULES)

Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
<210> sequence id number  
<400> sequence id number  
000

9 \_\_\_\_\_ Use of n's or Xaa's  
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 \_\_\_\_\_ Invalid <213>  
\_\_\_\_\_ Response

Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or Artificial Sequence.

11 ☒ Use of <220>

Sequence(s) \_\_\_\_\_ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12 \_\_\_\_\_ PatentIn 2.0  
\_\_\_\_\_ "bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 \_\_\_\_\_ Misuse of n

n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.



**COPY**

PCT09

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/857,815

DATE: 10/29/2001  
TIME: 13:12:54

Input Set : A:\09-857,815-sequence listing.txt  
Output Set: N:\CRF3\10292001\I857815.raw

2 <110> APPLICANT: Takeda Chemical Industries, Ltd.  
W--> 3 <120> TITLE OF INVENTION: Betacellulin Mutein  
W--> 4 <130> FILE REFERENCE: 2576WO0P  
C--> 5 <140> CURRENT APPLICATION NUMBER: US/09/857,815  
C--> 5 <141> CURRENT FILING DATE: 2001-06-08  
5 <150> PRIOR APPLICATION NUMBER: JP 10-350377  
6 <151> PRIOR FILING DATE: 1998-12-09  
7 <150> PRIOR APPLICATION NUMBER: JP 11-55326  
8 <151> PRIOR FILING DATE: 1999-03-03  
W--> 9 <160> NUMBER OF SEQ ID: 56  
W--> 10 <210> SEQ ID NO: 1  
11 <211> LENGTH: 77  
12 <212> TYPE: PRT  
13 <213> ORGANISM: Artificial Sequence  
W--> 14 <220> FEATURE:  
W--> 14 <223> OTHER INFORMATION:  
W--> 14 <400> SEQUENCE: 1  
15 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly  
16 1 5 10 15  
17 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Gln Ser Lys Arg Lys  
18 20 25 30  
19 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys  
20 35 40 45  
21 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys  
22 50 55 60  
23 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Asp  
24 65 70 75  
25 <210> SEQ ID NO: 2  
26 <211> LENGTH: 76  
27 <212> TYPE: PRT  
28 <213> ORGANISM: Artificial Sequence  
W--> 29 <220> FEATURE:  
W--> 29 <223> OTHER INFORMATION:  
W--> 29 <400> SEQUENCE: 2  
30 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly  
31 1 5 10 15  
32 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Gln Ser Lys Arg Lys  
33 20 25 30  
34 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys  
35 35 40 45  
36 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys  
37 50 55 60  
38 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val  
39 65 70 75  
40 <210> SEQ ID NO: 3  
41 <211> LENGTH: 47  
42 <212> TYPE: PRT

Does Not Comply  
Corrected Diskette Needed

Errored

Errored



**COPY**

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/857,815

DATE: 10/29/2001

TIME: 13:12:54

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

43 <213> ORGANISM: Artificial Sequence  
W--> 44 <220> FEATURE: 30  
W--> 44 <223> OTHER INFORMATION:  
W--> 44 <400> SEQUENCE: 3  
45 Arg Lys Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys  
46 1 60 5 10 15  
47 Ile Lys Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys  
48 75 20 25 30  
49 Val Cys Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Asp  
50 35 40 45  
51 <210> SEQ ID NO: 4  
52 <211> LENGTH: 46  
53 <212> TYPE: PRT  
54 <213> ORGANISM: Artificial Sequence  
W--> 55 <220> FEATURE:  
W--> 55 <223> OTHER INFORMATION:  
W--> 55 <400> SEQUENCE: 4  
56 Arg Lys Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys  
57 1 5 10 15  
58 Ile Lys Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys  
59 20 25 30  
60 Val Cys Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val  
61 35 40 45  
62 <210> SEQ ID NO: 5  
63 <211> LENGTH: 79  
64 <212> TYPE: PRT  
65 <213> ORGANISM: Artificial Sequence  
W--> 66 <220> FEATURE:  
W--> 66 <223> OTHER INFORMATION:  
W--> 66 <400> SEQUENCE: 5  
67 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly  
68 1 5 10 15  
69 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Thr Gln Ser Lys Arg Lys  
70 20 25 30  
71 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys  
72 35 40 45  
73 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys  
74 50 55 60  
75 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Leu Phe Tyr  
76 65 70 75  
77 <210> SEQ ID NO: 6  
78 <211> LENGTH: 78  
79 <212> TYPE: PRT  
80 <213> ORGANISM: Artificial Sequence  
W--> 81 <220> FEATURE:  
W--> 81 <223> OTHER INFORMATION:  
W--> 81 <400> SEQUENCE: 6  
82 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly  
83 1 5 10 15

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/857,815

DATE: 10/29/2001

TIME: 13:12:54

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

```
84 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Thr Gln Ser Lys Arg Lys
85 10 20 30 25 30
86 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys
87 35 40 45
88 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys
89 50 45 55 60
90 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Leu Phe
91 65 70 75
92 <210> SEQ ID NO: 7
93 <211> LENGTH: 77
94 <212> TYPE: PRT
95 <213> ORGANISM: Artificial Sequence
W--> 96 <220> FEATURE:
W--> 96 <223> OTHER INFORMATION:
W--> 96 <400> SEQUENCE: 7
97 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly
98 1 5 10 15
99 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Thr Gln Ser Lys Arg Lys
100 20 25 30
101 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys
102 35 40 45
103 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys
104 50 55 60
105 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Leu
106 65 70 75
107 <210> SEQ ID NO: 8
108 <211> LENGTH: 79
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
W--> 111 <220> FEATURE:
W--> 111 <223> OTHER INFORMATION:
W--> 111 <400> SEQUENCE: 8
112 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly
113 1 5 10 15
114 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Thr Gln Ser Lys Arg Lys
115 20 25 30
116 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys
117 35 40 45
118 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys
119 50 55 60
120 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Asp Phe Tyr
121 65 70 75
122 <210> SEQ ID NO: 9
123 <211> LENGTH: 78
124 <212> TYPE: PRT
125 <213> ORGANISM: Artificial Sequence
W--> 126 <220> FEATURE:
W--> 126 <223> OTHER INFORMATION:
W--> 126 <400> SEQUENCE: 9
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The type of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

## RAW SEQUENCE LISTING

DATE: 10/29/2001

PATENT APPLICATION: US/09/857,815

TIME: 13:12:54

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

```
127 Asp Gly Asn Ser Thr Arg Ser Pro Glu Thr Asn Gly Leu Leu Cys Gly
128 1 5 10 15
129 Asp Pro Glu Glu Asn Cys Ala Ala Thr Thr Thr Gln Ser Lys Arg Lys
130 20 25 30
131 Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys
132 35 40 45
133 Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys
134 50 55 60
135 Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Asp Phe
136 65 70 75
137 <210> SEQ ID NO: 10
138 <211> LENGTH: 49
139 <212> TYPE: PRT
140 <213> ORGANISM: Artificial Sequence
W--> 141 <220> FEATURE:
W--> 141 <223> OTHER INFORMATION:
W--> 141 <400> SEQUENCE: 10
142 Arg Lys Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys
143 1 5 10 15
144 Ile Lys Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys
145 20 25 30
146 Val Cys Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Leu Phe
147 35 40 45
148 Tyr
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 48
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
W--> 153 <220> FEATURE:
W--> 153 <223> OTHER INFORMATION:
W--> 153 <400> SEQUENCE: 11
154 Arg Lys Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys
155 1 5 10 15
156 Ile Lys Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys
157 20 25 30
158 Val Cys Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Leu Phe
159 35 40 45
160 <210> SEQ ID NO: 12
161 <211> LENGTH: 47
162 <212> TYPE: PRT
163 <213> ORGANISM: Artificial Sequence
W--> 164 <220> FEATURE:
W--> 164 <223> OTHER INFORMATION:
W--> 164 <400> SEQUENCE: 12
165 Arg Lys Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys
166 1 5 10 15
167 Ile Lys Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys
168 20 25 30
169 Val Cys Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Leu
```



DATE: 10/29/2001

TIME: 13:12:54

Output Set: N:\CRF3\10292001\I857815.raw

10/29/01

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/857,815

DATE: 10/29/2001

TIME: 13:12:55

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

L:3 M:283 W: Missing Blank Line separator, <120> field identifier  
L:4 M:283 W: Missing Blank Line separator, <130> field identifier  
L:5 M:270 C: Current Application Number differs, Replaced Current Application No  
L:5 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:9 M:283 W: Missing Blank Line separator, <160> field identifier  
L:10 M:283 W: Missing Blank Line separator, <210> field identifier  
L:14 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:14 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:14 M:283 W: Missing Blank Line separator, <400> field identifier  
L:29 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:29 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:29 M:283 W: Missing Blank Line separator, <400> field identifier  
L:44 M:258 W: Mandatory Feature missing, <220> FEATURE:  
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L:55 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:55 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:55 M:283 W: Missing Blank Line separator, <400> field identifier  
L:66 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:66 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:66 M:283 W: Missing Blank Line separator, <400> field identifier  
L:81 M:258 W: Mandatory Feature missing, <220> FEATURE:  
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L:81 M:283 W: Missing Blank Line separator, <400> field identifier  
L:96 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:96 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:96 M:283 W: Missing Blank Line separator, <400> field identifier  
L:111 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:111 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:111 M:283 W: Missing Blank Line separator, <400> field identifier  
L:126 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:126 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:126 M:283 W: Missing Blank Line separator, <400> field identifier  
L:141 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:141 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:141 M:283 W: Missing Blank Line separator, <400> field identifier  
L:153 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:153 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:153 M:283 W: Missing Blank Line separator, <400> field identifier  
L:164 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:164 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:164 M:283 W: Missing Blank Line separator, <400> field identifier  
L:175 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:175 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:175 M:283 W: Missing Blank Line separator, <400> field identifier  
L:187 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:187 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:187 M:283 W: Missing Blank Line separator, <400> field identifier

# COPY

## VERIFICATION SUMMARY

DATE: 10/29/2001

PATENT APPLICATION: US/09/857,815

TIME: 13:12:55

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

L:198 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:198 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:198 M:283 W: Missing Blank Line separator, <400> field identifier  
L:199 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=15  
L:207 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:207 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:207 M:283 W: Missing Blank Line separator, <400> field identifier  
L:208 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=16  
L:216 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:216 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:216 M:283 W: Missing Blank Line separator, <400> field identifier  
L:217 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=17  
L:224 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:224 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:224 M:283 W: Missing Blank Line separator, <400> field identifier  
L:225 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=18  
L:232 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:232 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:232 M:283 W: Missing Blank Line separator, <400> field identifier  
L:233 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=19  
L:241 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:241 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:241 M:283 W: Missing Blank Line separator, <400> field identifier  
L:242 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=20  
L:250 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:250 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:250 M:283 W: Missing Blank Line separator, <400> field identifier  
L:251 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=21  
L:259 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:259 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:259 M:283 W: Missing Blank Line separator, <400> field identifier  
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M:112 Repeated in SeqNo=22  
L:268 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:268 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:268 M:283 W: Missing Blank Line separator, <400> field identifier  
L:269 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=23  
L:277 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:277 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:277 M:283 W: Missing Blank Line separator, <400> field identifier  
L:278 M:112 C: (48) String data converted to lower case,

# COPY

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/857,815

DATE: 10/29/2001

TIME: 13:12:55

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

M:112 Repeated in SeqNo=24  
L:285 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:285 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:285 M:283 W: Missing Blank Line separator, <400> field identifier  
L:286 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=25  
L:293 M:283 W: Missing Blank Line separator, <400> field identifier  
L:294 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=26  
L:301 M:283 W: Missing Blank Line separator, <400> field identifier  
L:302 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=27  
L:309 M:283 W: Missing Blank Line separator, <400> field identifier  
L:310 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=28  
L:317 M:283 W: Missing Blank Line separator, <400> field identifier  
L:318 M:112 C: (48) String data converted to lower case,  
L:323 M:283 W: Missing Blank Line separator, <400> field identifier  
L:324 M:112 C: (48) String data converted to lower case,  
L:329 M:283 W: Missing Blank Line separator, <400> field identifier  
L:330 M:112 C: (48) String data converted to lower case,  
L:335 M:283 W: Missing Blank Line separator, <400> field identifier  
L:336 M:112 C: (48) String data converted to lower case,  
L:341 M:283 W: Missing Blank Line separator, <400> field identifier  
L:342 M:112 C: (48) String data converted to lower case,  
L:347 M:283 W: Missing Blank Line separator, <400> field identifier  
L:348 M:112 C: (48) String data converted to lower case,  
L:353 M:283 W: Missing Blank Line separator, <400> field identifier  
L:368 M:283 W: Missing Blank Line separator, <400> field identifier  
L:369 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=36  
L:376 M:282 W: Numeric Field Identifier Missing, <212> is required.  
L:376 M:283 W: Missing Blank Line separator, <400> field identifier  
L:390 M:282 W: Numeric Field Identifier Missing, <212> is required.  
L:390 M:283 W: Missing Blank Line separator, <400> field identifier  
L:403 M:283 W: Missing Blank Line separator, <400> field identifier  
L:404 M:112 C: (48) String data converted to lower case,  
L:409 M:283 W: Missing Blank Line separator, <400> field identifier  
L:410 M:112 C: (48) String data converted to lower case,  
L:415 M:283 W: Missing Blank Line separator, <400> field identifier  
L:416 M:112 C: (48) String data converted to lower case,  
L:421 M:283 W: Missing Blank Line separator, <400> field identifier  
L:422 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=42  
L:430 M:283 W: Missing Blank Line separator, <400> field identifier  
L:431 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=43  
L:438 M:283 W: Missing Blank Line separator, <400> field identifier  
L:451 M:283 W: Missing Blank Line separator, <400> field identifier

**COPY**

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/857,815

DATE: 10/29/2001

TIME: 13:12:55

Input Set : A:\09-857,815-sequence listing.txt

Output Set: N:\CRF3\10292001\I857815.raw

L:462 M:283 W: Missing Blank Line separator, <400> field identifier  
L:479 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=47  
L:489 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=48  
L:497 M:112 C: (48) String data converted to lower case,  
M:112 Repeated in SeqNo=49  
L:505 M:112 C: (48) String data converted to lower case,



Docket No. 55965 (46342)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application: T. Ito, et al.

Serial No.: 09/857,815

Filed: June 8, 2001

For: BETACELLULIN MUTEIN

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WASHINGTON, DC 20231

Sir:

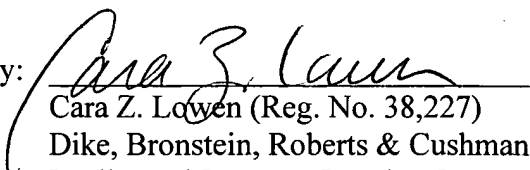
**Statements In Support Of Filing And Submissions  
In Accordance With 37 CFR §§ 1.821-1.825**

In accordance with 37 CFR §§1.821-1.825, I hereby state that the content of the paper copy of the corrected sequence listing (pages 1/15-15/15) and computer-readable copies of the corrected sequence listing (CRF) submitted in accordance with 37 CFR §§1.821(c) and (e), respectively, are the same. I hereby state that the submission, filed in accordance with 37 CFR §1.821(g) does not introduce new matter.

Respectfully submitted,

Date: February 25, 2002

By:

  
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